

SilverWrap™ Micro-perforated LD

Product Code: LD-B

Vapour Permeable reflective wall insulation

For use in brick veneer and drained cavity wall systems in residential and commercial buildings



SilverWrap™ Micro-perforated is a Light Duty, Vapour Permeable wall wrap designed for use in brick veneer and drained cavity wall systems to reduce the risk of interstitial condensation. The reflective foil side provides extra R-value when installed facing an air cavity, and the multi-layer structure provides superior strength, flexibility and durability. Classified as Class 4, Vapour Permeable, a dense pattern of micro-perforations allows water vapour to escape from the wall structure. SilverWrap™ Micro-perforated also acts as a barrier to air, radiant heat and dust penetration.

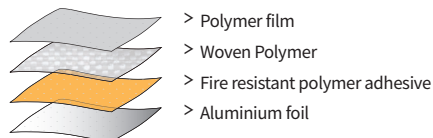
- > Micro-perforated to Class 4 Vapour Permeable
- > Ideal for drained cavity systems in Climate Zones 6 - 8
- > Strong and light weight
- > Air Barrier
- > Low Flammability, suitable for use in all BALs in bushfire-prone areas
- > 97% reflective

Application

Class 4 Vapour Permeable wall wraps are not recommended for wet tropical climate zones.

Construction

SilverWrap™ Micro-perforated is a flexible four-layer product made with a combination of anti-oxidant UV-stabilised woven polypropylene, 97% reflective aluminium foil, and fire-resistant polymer adhesive, backed by a UV-stabilised polymer flood coat. In order to minimise shrinkage after installation, our products are pre-shrunk during the manufacturing process.



Ametalin utilises Advanced Laminating Technology; the polymer adhesive remains tacky indefinitely and provides superior resistance to heat, fire and delamination.

Declared Total System R-Values

Brick Veneer Wall

with SilverWrap™ Micro-perforated

Winter **R_T 1.29**

Summer **R_T 1.21**

Brick Veneer Wall

with SilverWrap™ Micro-perforated
+ R2.7 fibrous batt

Winter **R_T 2.93**

Summer **R_T 2.78**

R-values apply to typical conditions for mainland Australian capital cities and have been calculated by an independent consulting engineer, in accordance with AS/NZS 4859.1:2018. For detailed design of building systems readers are advised to seek advice from a qualified engineer, based on actual site conditions.

The contributions of this product to the total system R-value depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on upward facing surfaces and in those cavities that are ventilated.

Material Properties and Classifications

SilverWrap™ Micro-perforated Light Duty classifications in accordance with AS/NZS 4200.1:2017 and AS/NZS 4859.1:2018

| Criteria | Reference | Result | Requirement |
|---------------------------------------|--------------------|---|-----------------------------------|
| Flammability Index | AS 1530.2-1993 | Low ≤ 5 | High (> 5) / Low (≤ 5) |
| Nominal Thickness | | 0.09 mm | Value |
| Duty | AS/NZS 4200.1:2017 | Light | Classification |
| Tensile Strength Machine Direction | AS 1301.448s-91 | 10.9 kN/m | Min 7.5 kN/m |
| Tensile Strength Lateral Direction | AS 1301.448s-91 | 8.5 kN/m | Min 4.5 kN/m |
| Edge Tear Machine Direction | TAPPI T 470 om-89 | 444 N | Min 45 N |
| Edge Tear Lateral Direction | TAPPI T 470 om-89 | 372 N | Min 45 N |
| Vapour Control | ASTM E96 | Class 4 Vapour Permeable | Class 1 to 4 |
| Vapour Permeance | ASTM E96 | 1.600 $\mu\text{g}/\text{N}\cdot\text{s}$ | Value |
| Water Control | AS/NZS 4201.4:1994 | Non-water Barrier | Classification |
| Air Control | AS/NZS 4200.1:2017 | Air Barrier | Classification |
| Resistance to Dry Delamination | AS/NZS 4201.1:1994 | Pass | Pass |
| Resistance to Wet Delamination | AS/NZS 4201.2:1994 | Pass | Pass |
| Shrinkage (Repeated wetting & drying) | AS/NZS 4201.3:1994 | 0.0% | $< 0.5\%$ |
| Electrically Conductive | AS/NZS 4200.1:2017 | Conductive | Classification |
| Emittance Value | AS/NZS 4201.5:1994 | Anti-glare side: 0.90, Foil side: 0.03 | Value |
| Emittance Classification | AS/NZS 4200.1:2017 | IR Non-reflective, IR Reflective | Classification |
| Emittance Category | AS/NZS 4200.1:2017 | RN | Category |

NCC Compliant

SilverWrap™ Micro-perforated complies with AS/NZS 4859.1:2018 and AS/NZS 4200.1:2017, and therefore meets all of the requirements of the *National Construction Code* of Australia for insulation and sarking-type materials.

SilverWrap™ Micro-perforated is classified as a Non-Water Barrier under AS/NZS 4200.1:2017 *Pliable building membranes and underlays, Part 1: Material*, which requires testing under a 100 mm water column.

Vapour Permeance

Vapour Permeance: 1.600 $\mu\text{g}/\text{N}\cdot\text{s}$

Vapour Resistance: 0.625 $\text{MN}\cdot\text{s}/\text{g}$

WVTR: 194.0 $\text{g}/\text{m}^2\cdot 24\text{hr}$

Tested in accordance with AS/NZS 4200.1:2017.

A detailed hygrothermal analysis is recommended for moisture control in building design.

Fire Performance

Flammability Index

Low (≤ 5)

Tested in accordance with AS 1530.2-1993 - *Methods for fire tests on building materials, components and structures Part 2: Test for flammability of materials*.

Bushfire Attack Levels

Complies with AS 3959-2018 *Construction of buildings in bushfire-prone areas* for use in all BALs.

Seek independent advice regarding the selection of sarking prior to installation in the BAL design.

Dimensions

1350 mm x 60 m (81 m^2)

1500 mm x 30 m (45 m^2)

Nominal thickness: 0.09 mm

Specification Notes

When specifying state the following:

Product Name: Ametalin SilverWrap™ Micro-perforated

The insulation to be installed shall be Ametalin SilverWrap™ Micro-perforated, Vapour Permeable reflective wall wrap and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation*.

Emittance Value: 0.90, 0.03

Emittance Classification: IR Non-reflective, IR Reflective

Vapour Control Classification: Vapour Permeable, 1.600 $\mu\text{g}/\text{N}\cdot\text{s}$

Water Barrier Classification: Non-water Barrier

Air Barrier Classification: Air Barrier

Duty: Light in accordance with AS/NZS 4200.1:2017

Complete details available on our website:

<https://www.ametalin.com>

Handling and Storage

Store this product undercover in a clean, dry place in the pack provided out of contact with alkaline products, cement and mortar.

Performance insulation for a greener world

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Ametal

Durability may be affected by environmental factors, including chemical and airborne pollutants, if used in industrial or farm buildings.

Australian designed for Australian conditions. Manufactured by: Ametalin 9-11 Playford Crescent, Salisbury North S 5108 T: +61 8 8285 6955 F: +61 8 8285 5911 E: info@ametalin.com

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